

IN THE CLAIMS

1. (currently amended) An antenna unit for use with a receiver, the antenna unit comprising:

an antenna;

a high-frequency, fixed-gain amplifier for amplifying a reception signal received by the antenna; and

an output cable, wherein

~~wherein,~~ an output signal of the high-frequency amplifier is supplied to the receiver through ~~an~~ the output cable~~,~~

an operating voltage is supplied from the receiver to the high-frequency amplifier through the output cable, and

a signal to control a gain is supplied to the high-frequency amplifier from the receiver through the output cable.

2. (previously presented) The antenna unit according to Claim 1, wherein the output cable comprises a coaxial cable.

3. (currently amended) A receiver using an antenna unit that has a high-frequency amplifier, outputs a signal received by an antenna with a predetermined gain through an output cable, and in which the gain is changeable, the receiver comprising:

a voltage source providing an operating voltage for the high-frequency amplifier; and

a control circuit for controlling a magnitude of the operating voltage~~,~~ so that the operating voltage is one of two values, wherein

~~wherein,~~ the operating voltage from the voltage source is supplied to the high-frequency amplifier of the antenna unit through the output cable, and

the control circuit controls the magnitude of the operating voltage to change the gain of the high-frequency amplifier.

4. (previously presented) The receiver according to Claim 3, wherein the output cable comprises a coaxial cable.

5. (currently amended) An antenna unit for use with a receiver, the antenna unit comprising:

an antenna;

a high-frequency, fixed-gain amplifier for amplifying a reception signal received by the antenna;

an output cable;

~~a~~ fixed-gain attenuator circuit; and

a switching circuit, wherein

an output signal of the high-frequency amplifier is supplied to the receiver through the output cable,

~~wherein, an operating voltage is supplied from the receiver, to which an output signal of the high-frequency amplifier is supplied through the output cable, to the high-frequency amplifier through the output cable,~~

a control signal is supplied from the receiver to the switching circuit through the output cable, and

the switching circuit is controlled in accordance with the control signal to selectively connect one of the high-frequency amplifier and the attenuator circuit to a signal line between the antenna and the output cable.

6. (previously presented) The antenna unit according to Claim 5, wherein the output cable comprises a coaxial cable.

7. (previously presented) The antenna unit according to Claim 5, further comprising a voltage detector circuit, wherein

the control signal is represented by a voltage change in the operating voltage,

the voltage change in the operating voltage is detected by the voltage detector circuit, and

a detection output of the voltage detector circuit controls the switching circuit.

8. (currently amended) The antenna unit according to Claim 7, wherein

the control signal is generated from an automatic gain control voltage in the receiver,

when the level of the automatic gain control voltage is equal to or higher than a predetermined level, the attenuator circuit is ~~selected~~, connected to a signal line, and

when the level of the automatic gain control voltage is lower than the predetermined level, the high-frequency amplifier is ~~selected~~ connected to a signal line.

9. (currently amended) The antenna unit according to claim 8, wherein the predetermined level to control ~~selection in connecting~~ by the switching circuit has hysteresis characteristics.

10. (currently amended) A receiver using an antenna unit that transmits a signal received by an antenna with a predetermined gain to an output cable and which is capable of changing the gain in accordance with a first control signal, the receiver comprising:

a connector connected to the output cable;

a receiving circuit including at least a high-frequency amplifier, a variable attenuator circuit, and a switching circuit; and

a generator circuit for generating the first control signal and for generating second and third control signals from an automatic gain control voltage corresponding to an output level of the receiving circuit, wherein

~~wherein~~, an operating voltage, having one of two values, is supplied to the antenna unit through the output cable,

the first control signal generated by the generator circuit is supplied to the antenna unit through the output cable to change the gain,

the switching circuit is controlled in accordance with the second control signal to selectively connect one of the high-frequency amplifier and the variable attenuator circuit to a

signal line between the connector and a circuit in a subsequent stage, and

the third control signal controls a gain of the variable attenuator circuit.

11. (previously presented) The receiver according to Claim 10, further comprising a circuit for changing the operating voltage supplied to the antenna unit according to the first control signal, the antenna unit being set so that the gain changes according to a change in the operating voltage.

12. (previously presented) The receiver according to Claim 10, wherein the output cable comprises a coaxial cable.

13. (currently amended) The receiver according to Claim 10, wherein

when a level of the automatic gain control voltage is equal to or higher than a predetermined level, the attenuator circuit is ~~selected~~, connected to the signal line, and

when the level of the ~~AGC~~automatic gain control voltage is lower than the predetermined level, the high-frequency amplifier is ~~selected~~ connected to the signal line.

14. (currently amended) The receiver according to Claim 13, wherein the predetermined level to control ~~selection~~in connection by the switching circuit has hysteresis characteristics.

15. (new) The antenna unit according to Claim 1, wherein the high-frequency amplifier is connected to a band-pass filter.